

AMENDMENTS TO THE SPECIFICATION.

1. Please edit the following paragraph beginning on line 11 at page 19 as follows:

FIG. 19 shows an anatomical view of a shoulder joint 1500 that is formed from a scapula 1502 and a humerus 1504 with the surrounding ligaments and muscle omitted for clarity. The landmarks used to create the three dimensional model for the shoulder joint 1500 are a coronal plane 1506 defined by a medial angle 1508 of the scapula 1502, a lateral angle 1510 of the scapula 1502, and a most superior aspect 1513 of a neck 1512 of the scapula 1502. The scapula includes a glenoid 1514 into which a head 1516 of the humerus 1504 fits. The humerus 1504 has an intertrochanteric groove 1518 that has a most superior aspect 1520. The humerus 1504 also has a midpoint 1522 between the coronoid fossa and the radial fossa. The midpoint 1522 and the most superior aspect 1520 of the intertrochanteric groove 1518 define an anatomical axis 1524 of the arm. Inclination of the glenoid 1514 is defined in reference to a line ~~1526~~ 1528 extending from the most superior aspect 1513 of the neck 1512 to a most inferior aspect ~~1528~~ 1526 of the neck 1512. Version of the glenoid 1514 is defined with reference to a plane 1530 perpendicular to the coronal plane 1506. If necessary, a sagittal plane can be defined by the anatomical axis 1524 and a midpoint of the volar radiocarpal ligament of the wrist (not shown).

2. Please edit the following paragraph beginning on line 27 at page 19 as follows:

The method and system for creating the three dimensional model for use in performing shoulder replacement surgery described in FIG. 20 is similar to that described with reference to FIG. 6. After initialization the system starts and proceeds to a block 1600 that instructs and guides the surgeon through the digitization of the scapular landmarks including the medial angle 1508, the lateral angle 1510, and the most superior aspect 1513 of the neck 1512. After these landmarks have been digitized, the system proceeds to a block 1602 that creates the scapular reference system including the coronal plane 1506, the line ~~1526~~ 1528 and the plane 1530. This reference system will also create a Cartesian coordinate system with the x-axis and the y-axis on the coronal plane 1506 and the z-axis perpendicular to the x and y axes. After the creation of the scapular reference system by the block 1602, the system proceeds to a block 1604 that instructs the surgeon to place the shoulder and arm in a neutral position. The system then continues to a block 1606 that guides the surgeon through the digitizing of the head 1516 of the humerus 1504. This is done in a manner similar to the digitization of the femoral head 420 in the hip joint 416

using suitable a sphere matching algorithm such as least squares and the like. The system then continues to a block 1608 that instructs and guides the surgeon through the digitization of the humeral landmarks, including the most superior aspect 1520 of the intertrochanteric groove 1518 and the midpoint 1522 between the coronoid fossa and the radial fossa. The system then proceeds to a block 1610 that creates the humeral reference system including the anatomical axis 1524 and the sagittal plane if needed.